



# The EPA postdoctoral experience

*EPA has one of the world's strongest postdoctoral programs. The program provides outstanding training and mentoring for scientists and engineers who will be future leaders in solving environmental problems. EPA scientists, who are on the cutting edge of environmental and health-related research, are dedicated to training and working side by side with its postdoctoral fellows to answer important science questions.*

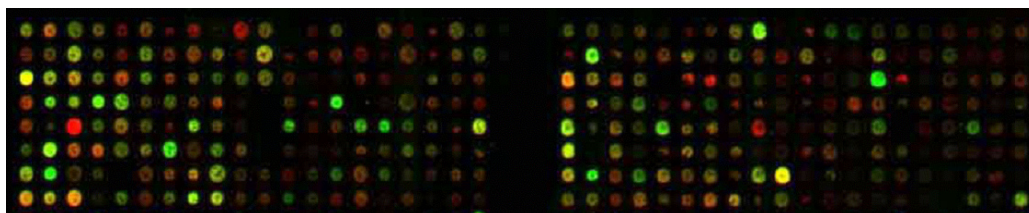
*The experience offers many opportunities, including:*

## **Science Support:**

- *Active postdoctoral Trainee Organization*
- *State-of-the-art facilities*
- *World-class scientific expertise*
- *Locations throughout the United States*
- *Travel to professional scientific meetings*

## **Cutting-Edge Research Opportunities:**

- *Nanotechnology*
- *Human Subjects*
- *Terrorist Event Cleanup*
- *World Trade Center*
- *Methamphetamine Cleanup*
- *Dioxin*
- *Computational Toxicology*
- *Mercury*
- *PFOA/PFOS (Teflon)*
- *Particulate Matter*
- *Homeland Security Research*
- *Sustainability*



## **A Comprehensive Benefits Package:**

- *Salary range from \$41,772-\$78,745*
- *Vacation and sick leave*
- *Federal health benefits, life insurance, and retirement program*

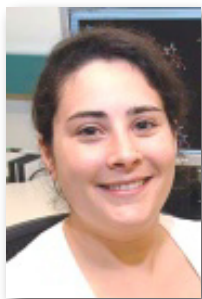
## **An Unparalleled Lifestyle:**

- *Consistently ranked as one of the Best Places To Work for Postdoctoral Fellows*
- *A workplace where the contributions of people of varied heritage and traditions are respected and valued*
- *Onsite daycare*
- *Fitness center*
- *Moderate climate*

**To learn more about  
EPA's postdoctoral experience visit:  
[www.epa.gov/ord/htm/jobs\\_ord](http://www.epa.gov/ord/htm/jobs_ord)**

**These positions are filled under R-Authority**

# Read what our current Postdoctoral Fellow's are saying about the EPA experience!



**Melissa Pasquinelli, Ph.D.**  
**Postdoctoral Fellow**  
**EPA's National Center for Computational Toxicology**  
**President of the EPA-RTP Trainee Organization**

*"Being a postdoc at the EPA has given me the opportunity to apply my background in the basic sciences to environmentally relevant problems. It has also helped me develop into a better scientist through high-quality research, interdisciplinary collaborations, and the extensive mentoring experiences that have been focal points of my training."*

## **Research Area:**

Melissa Pasquinelli received her Ph.D. in chemistry from Carnegie Mellon University. Her research focuses on the development and application of molecular modeling techniques to address problems in risk assessment. Her work yields computational tools that can be used by the Agency to evaluate chemical toxicity. She is applying these tools to study the human health effects of environmental chemicals by examining the toxicological mechanisms of endocrine-disrupting chemicals and the metabolism of pesticides.



**Michael Breen, Ph.D.**  
**Postdoctoral Fellow**  
**EPA's National Center for Computational Toxicology**

*"I truly enjoy the interesting research projects and outstanding mentoring available at EPA, as well as the tremendous training opportunities at local universities and biotechnology organizations and companies in the Research Triangle, and the sensational Carolina weather."*

## **Research Area:**

Michael Breen received his Ph.D. in biomedical engineering from Case Western Reserve University in 2004. His research at EPA focuses on developing and applying computational systems biology tools and models that will improve our understanding of the complex linkages between chemical exposures, biological dose, early effects, altered structure and function, and human disease. In particular, his research will provide mechanistic mathematical models to predict dose-response relationships for a wide variety of environmental chemicals. These models will be coupled to existing exposure models to represent likely responses resulting from relevant human exposure conditions.



**Rachelle Duvall, Ph.D.**  
**Postdoctoral Fellow**  
**EPA's National Exposure Research Laboratory**

*"I received an article last year about EPA's ranking as 'Best Places for Postdocs to Work,' which helped me make the decision to work here. I am glad that EPA made the top of the list again this year, and deservedly so! I have had a rewarding experience so far. I am involved in fascinating research, and I also find that I'm constantly learning new things, which is great. EPA also has exceptional mentors who have helped me greatly. Also, having spent most of my life in areas with very cold winters, I'm really enjoying the warmer winters in North Carolina."*

## **Research Area:**

Rachelle Duvall obtained her Ph.D. in civil and environmental engineering with a focus on air pollution control from the University of Wisconsin Madison in 2005. Dr. Duvall's research at EPA focuses on determining sources of air pollution, such as motor vehicles and coal combustion, using a variety of source-receptor models. In addition, she is linking sources to health effects, such as lung inflammation and respiratory disease, to identify which particulate matter sources are responsible for specific health impacts.



**Richard Lavrich, Ph.D.**  
**Postdoctoral Fellow**  
**EPA's National Risk Management Research Laboratory**

*"Working within the EPA has been a rewarding and stimulating experience. Being part of a team involved in unraveling the complex nature of the chemical composition of fine particulate matter has been a fascinating endeavor."*

## **Research Area:**

Richard Lavrich received a Ph.D. in physical chemistry from Kent State University in 2001. His research at EPA focuses on the development of novel methods for the identification and quantification of organic molecules in the carbonaceous portion of fine particulate matter (PM). Recent efforts have been dedicated to the application of thermal methods to extract the semivolatile components of fine PM for chemical analysis. His research aims to provide information about the determination of PM source characteristics, air quality model development, estimation of PM exposures from sources; and potential assessment of the biotoxic constituents of PM by size.

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